REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

I. Disposition of Claims

Claims 1-13 are pending in this application. Claims 1, 6, and 10 are independent. The remaining claims depend, directly or indirectly, from claims 1, 6, and 10. Claims 10 and 11 have been amended to correct typographical errors. Additionally, claims 1, 6, and 10 have been amended for clarity. No new matter has been added by way of these amendments.

II. Objections

The drawings and claims were objected to because of typographical errors. Claim 10 has been amended in this reply to correct the typographical error.

Further, substitute drawings of Figures 6, 8, 10, and 11 have been included to correct typographical errors. In view of these amendments, this objection is now moot. Accordingly withdrawal of this objection is respectfully requested.

III. Rejections under 35 U.S.C § 103

Claims 1-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,222,634 ("Dubbels") in view of U.S. Patent No. 6,011,905 ("Huttenlocher"). This rejection is respectfully traversed.

As recited in amended, independent claims 1, 6, and 10, the present invention relates to a printer or a printer controlling method for *directly* accessing a resource existing on a network, for example, the Internet, and downloading the resource and printing the resource.

In one or more embodiments of the present invention, a printer includes a first request means, which makes a first request for directly obtaining a resource from a server. A structural means of the printer determines a structure of the resource based on the first response directly from the server and a setting means of the printer sets the pages to be printed based on the structure of the resource. The printer initiates a second request using a second request means for directly obtaining structural data within the set pages to be printed. The printer further includes a generating means, which generates print data based on a second response. Finally, a printing means of the printer prints based on the generated print data.

Similarly, in one or more embodiments of the present invention, a printer controlling method includes initiating a first request for directly obtaining a resource, determining the structure of the resource based on a first response to the first request, initiating a second request for setting pages to be printed based on the structure of the resource and directly obtaining the structural data within the set pages to be printed.

In the present invention, in one or more embodiments, the printer (1) *directly* obtains the resource. Further, the printer (2) determines a structure of the resource in response to a first request and (3) obtains structural data "to populate" a page defined by the structure in response to a second request. Advantageously, a printer may access a resource from the Internet, for example, without a computer system facilitating the

communication of data stored on a server, thereby efficiently using network resources. Additionally, initiating a first request and a second request allows a printer with limited memory to obtain resources without error.

In contrast, Dubbels generally relates to a method and apparatus for printing related web pages based on a predetermined criteria. Particularly, Dubbels provides a method and apparatus, where a web user may select several web pages from a single web site and print the selected web pages.

Figure 1 of Dubbels shows an apparatus for printing related web pages. In particular, Dubbels teaches a computer system (100), which includes application programs, and a web page print mechanism (128). The web page print mechanism (128) is an application program, which facilitates the printing of related web pages. For example Dubbels states, "[i]n the present invention, a computer system 100 includes a web page print mechanism 128 that allows multiple related web pages to be printed without manually printing each web page. The web page print mechanism 128 may exist on a single computer system, as shown in FIG. 5," (col. 3, l. 64 – col. 4, l. 4).

Dubbels teaches two specific embodiments in Figures 3 and 5. Dubbels states, "[t]he first embodiment uses an applet on the web client in conjunction with a print tool that resides on the web server...The second embodiment of the present invention does not require any software to be installed on the web server," (col. 5, ll. 7-18).

The print tool (330 in Figure 3), print applet (310 in Figure 3), and the web page print mechanism (128 in Figure 3 and 5) should not be confused with a printer or a controller of a printer. The print tool, print applet, and the web page mechanism are application programs that run on the web client (the computer system) or the web server

and facilitate the transmission of data between the network and the computer system. For example, "[p]rint applet is a small application such as a Java applet that is invoked when a user takes a particular action with respect to a selected web page," (col. 5, ll. 28-30) and "web page print mechanism 128 may be a separate application running on the web client 200 or may be a plug-in or Java applet/application for web browser application 210," (col 7. ll. 9-11).

The web page print mechanism includes various functional components, for example, web page parsing and listing mechanism, web page merging mechanism, web page selection mechanism, *etc.* These various functional components communicate with the server, thereby extracting particular web pages and compiling the extracted web pages to form a conglomerate web page. While these different functional components select parse, compile, *etc.* several web pages, *the conglomerate web page is printed using a typical print function of a web browser.* For example, "[t]he conglomerate web page may then be printed using the conventional print function that is supplied with the web browser application (step 480)," (col. 6, ll. 50-52). In other words, the physical printing of the web pages is a result of selecting a print button in the web browser.

Therefore, the assertion that Dubbels is equivalent to a printer is incorrect, *i.e.*, particular applicability to printing web pages on the Internet *does not* mean that the web page print mechanism is a printer. In fact, particular applicability to printing web pages on the Internet should be interpreted to mean that the web page print mechanism is an application that may be applied or used in facilitating communication between the server and the printer in generating the conglomerate web page. However, the Applicant respectfully notes that the actual printing of the conglomerate web page is initiated

through the print function of the browser.

In conventional printing, after communicating with the network and obtaining a resource, an applet or other application, *e.g.*, a web page print mechanism, sends the data to be printed to a hard disk of the computer system. A driver of the computer system translates the data cached on the hard disk into a format that the printer can understand and sends the translated data via a connection interface (*e.g.*, Universal Serial Bus (USB)). The printer receives the data from the computer system and stores a certain amount of the data in a buffer until the printing process is completed.

The following figure is presented to facilitate the understanding of the web page print mechanism as taught by Dubbels.

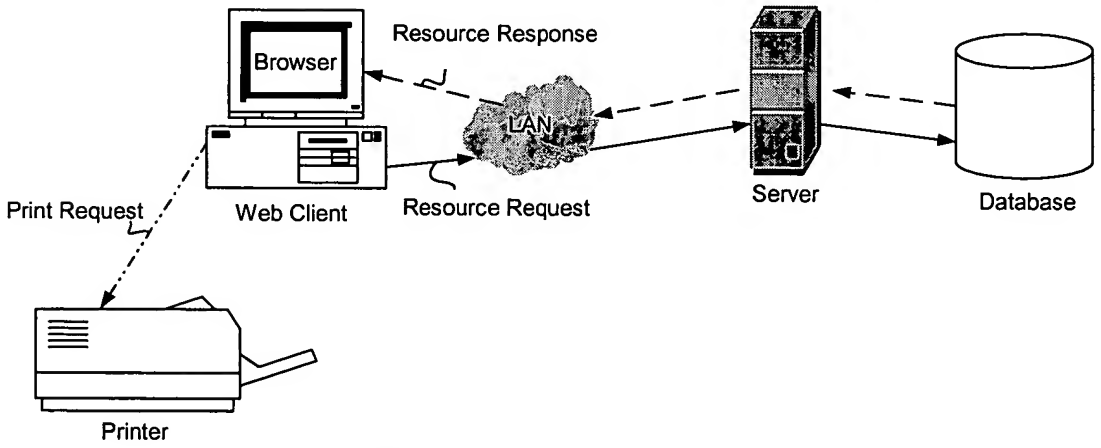

Figure 1-Typical Printing System

In the above Figure 1, using a web browser, a web client initiates a resource request via a local area network (LAN). (A web client being a computer system connected to a wide area network (WAN), LAN, or more specifically the Internet.) The resource request may be, for example, a request for access to a web site having several web pages. Further, the web site may reside on a server, which communicates a resource response, for example, contents of a web page, to the web client.

In Dubbels, the web client using the web page print mechanism selects particular

web pages, which are compiled into a conglomerate web page and displayed using the web browser. Then, the web client selects the print function of the web browser to print the conglomerate web page thereby initiating a print request. The print request results in a hard copy of the conglomerate web page. (Please see, *e.g.*, Figure 4 and 6 of Dubbels.)

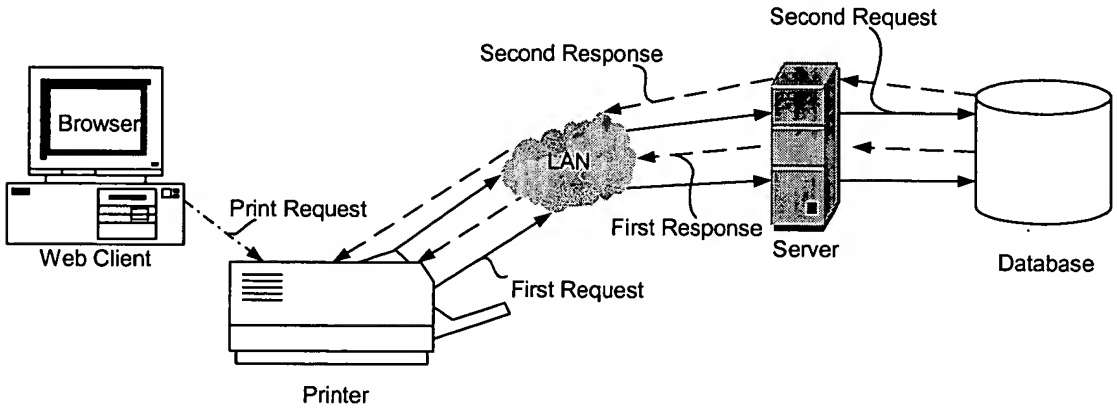

Figure 2- Embodiment of the Present Invention

The above figure (Figure 2) is presented herein to facilitate the understanding of an embodiment of the present invention. The invention is in no way intended to be limited by this figure or the following explanation.

In contrast to Figure 1, in one or more embodiments, a print receives a printer request from a web client that has identified a resource to be printed in Figure 2. The *printer* communicates a first request and a second request via a LAN to the server. Upon receipt of a first response by the printer, the structure of the resource is determined. The second response based on the second request is received, thereby obtaining the structural data for the pages defined by the first response. Using the structure and structural data of a page layout, the printer produces a hard copy of the resource. The Applicant respectfully points out that the computer system, more specifically, an applet or other application, was not used to communicate with the server, *i.e.*, the printer directly communicates with the server.

As shown by the above Figures 1 and 2, Dubbels is completely silent to, "first request means which makes a first request for obtaining a resource from a server; structural means for determining the structure of the resource based on the response from said server to said first request; setting means for setting pages to be printed based on the structure of said determined resource; second request means which makes a second request for obtaining structural data within said set pages to be printed; means for generating print data on the second response to said second request; and printing means for printing based on said generated print data," as recited claim 1.

First, as shown above in Figure 1, the printer in Dubbels is not in direct communication with the server. To the contrary, the web client or computer system using the web page print mechanism necessarily communicates directly with the server instead of the printer as required by independent claims 1, 6, and 10.

Further, the web page print mechanism of the web client is simply an application on the computer system, which facilitates printing of a conglomerate web page. In other words, the web page print mechanism as taught by Dubbels is not a printer. Consequently, Dubbels is completely silent to a first request means, a structural means, a setting means, a second request means, means for generating print data, and a printing means, as recited in claim 1.

Huttenlocher fails to provide that which Dubbels lacks with respect to independent claims 1, 6, and 10. Huttenlocher teaches a using data compression and decompression in printing highly structured document representations (*e.g.*, font of text characters, positions of characters on the page, the sizes of the page margins, *etc.*).

In particular, Huttenlocher compresses a representation and decompresses the

representation to more quickly render an image for printing (see, *e.g.*, col. 8, ll. 59-62), whereas the present invention extracts a structure using a structural means to define a page layout and, then, extracts structural data to populate the page layout. In other words, the structure and structural data are compressed and decompressed by a rendering engine according to the teachings of Huttenlocher. In contrast, the present invention as recited in claims 1, 6, and 10, determines the structure in response to a first request of a printer and obtains the structural data in response to a second request of the printer.

Huttenlocher is completely silent to a printer directly accessing a server to obtain a resource, and initiating a first request and a second request with respect to the claimed invention.

Because Dubbels does not teach the claimed invention with respect to claims 1, 6, and 10, and Huttenlocher fails to provide that which Dubbels lacks, claims 1, 6, and 10 are patentable over Dubbels and Huttenlocher, whether considered separately or in combination. Thus, claims 2-5, 7-9, and 11-13, which depend, directly or indirectly from claims 1, 6, and 10, are likewise patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

IV. Concluding Remarks

Applicant believes this reply to be fully responsive to all outstanding issues and place this application in condition for allowance. If this belief is incorrect, or other issues arise, do not hesitate to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 04783.010001).

Respectfully submitted,

Date: 5/23/03

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